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Page 1 of 8

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5-2-02

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/687,837

DATE: 04/23/2002 P.5

TIME: 09:34:13

Input Set : A:\20054210.app

Output Set: N:\CRF3\04232002\I687837.raw

3 <110> APPLICANT: Lu, Peter S.
4 Carman, Jonathan D.
5 Candia III, Albert F.
6 Arbbor Vita Corporation
8 <120> TITLE OF INVENTION: CLASP-2 TRANSMEMBRANE PROTEINS
10 <130> FILE REFERENCE: 020054-000210US
12 <140> CURRENT APPLICATION NUMBER: US 09/687,837
13 <141> CURRENT FILING DATE: 2000-10-13
15 <150> PRIOR APPLICATION NUMBER: US 60/129,171
16 <151> PRIOR FILING DATE: 1999-04-14
18 <150> PRIOR APPLICATION NUMBER: US 60/134,114
19 <151> PRIOR FILING DATE: 1999-05-14
21 <150> PRIOR APPLICATION NUMBER: US 60/134,118
22 <151> PRIOR FILING DATE: 1999-05-14
24 <150> PRIOR APPLICATION NUMBER: US 60/160,860
25 <151> PRIOR FILING DATE: 1999-10-21
27 <150> PRIOR APPLICATION NUMBER: US 60/162,498
28 <151> PRIOR FILING DATE: 1999-10-29
30 <150> PRIOR APPLICATION NUMBER: US 60/170,453
31 <151> PRIOR FILING DATE: 1999-12-13
33 <150> PRIOR APPLICATION NUMBER: US 60/176,195
34 <151> PRIOR FILING DATE: 2000-01-14
36 <150> PRIOR APPLICATION NUMBER: US 60/182,296
37 <151> PRIOR FILING DATE: 2000-02-14
39 <150> PRIOR APPLICATION NUMBER: US 09/547,276
40 <151> PRIOR FILING DATE: 2000-04-11
42 <150> PRIOR APPLICATION NUMBER: US 60/134,117
43 <151> PRIOR FILING DATE: 1999-05-14
45 <160> NUMBER OF SEQ ID NOS: 152
47 <170> SOFTWARE: PatentIn Ver. 2.1
49 <210> SEQ ID NO: 1
50 <211> LENGTH: 4807
51 <212> TYPE: DNA
52 <213> ORGANISM: Homo sapiens
54 <220> FEATURE:
55 <221> NAME/KEY: CDS
56 <222> LOCATION: (2)..(4060)
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Human cadherin-like asymmetry protein 2A
60 (CLASP-2A)
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63 a gtt tta cac cat cac caa aac cca gaa ttt tat gat gag att aaa ata 49
64 Val Leu His His His Gln Asn Pro Glu Phe Tyr Asp Glu Ile Lys Ile

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65	1		5		10		15										
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69				20				25					30				
71	ttc	cat	gtc	agc	tgt	gac	aac	tca	agt	aaa	gga	agc	acg	aag	aag	agg	145
72	Phe	His	Val	Ser	Cys	Asp	Asn	Ser	Lys	Gly	Ser	Thr	Lys	Lys	Arg		
73			35				40				45						
75	gat	gtc	gtt	gaa	acc	caa	gtt	ggc	tac	tcc	tgg	ctt	ccc	ctc	ctg	aaa	193
76	Asp	Val	Val	Glu	Thr	Gln	Val	Gly	Tyr	Ser	Trp	Leu	Pro	Leu	Leu	Lys	
77		50				55					60						
79	gac	gga	agg	gtg	gtg	aca	agc	gag	cag	cac	atc	ccg	gtc	tcg	gcg	aac	241
80	Asp	Gly	Arg	Val	Val	Thr	Ser	Glu	Gln	His	Ile	Pro	Val	Ser	Ala	Asn	
81	65				70			75			80						
83	ctt	cct	tcg	ggc	tat	ctt	ggc	tac	caa	gag	ctt	ggg	atg	ggc	agg	cat	289
84	Leu	Pro	Ser	Gly	Tyr	Leu	Gly	Tyr	Gln	Glu	Leu	Gly	Met	Gly	Arg	His	
85				85				90			95						
87	tat	ggt	ccg	gaa	att	aaa	tgg	gta	gat	gga	ggc	aag	cca	ctg	ctg	aaa	337
88	Tyr	Gly	Pro	Glu	Ile	Lys	Trp	Val	Asp	Gly	Gly	Lys	Pro	Leu	Leu	Lys	
89			100				105				110						
91	att	tcc	act	cat	ctg	gtt	tct	aca	gtg	tat	act	cag	gat	cag	cat	tta	385
92	Ile	Ser	Thr	His	Leu	Val	Ser	Thr	Val	Tyr	Thr	Gln	Asp	Gln	His	Leu	
93			115				120				125						
95	cat	aat	ttt	ttc	cag	tac	tgt	cag	aaa	acc	gaa	tct	gga	gcc	caa	gcc	433
96	His	Asn	Phe	Phe	Gln	Tyr	Cys	Gln	Lys	Thr	Glu	Ser	Gly	Ala	Gln	Ala	
97		130			135			140									
99	tta	gga	aac	gaa	ctt	gta	aag	tac	ctt	aag	agt	ctg	cat	gcg	atg	gaa	481
100	Leu	Gly	Asn	Glu	Leu	Val	Lys	Tyr	Leu	Lys	Ser	Leu	His	Ala	Met	Glu	
101	145				150			155			160						
103	ggc	cac	gtg	atg	atc	gcc	ttc	ttg	ccc	act	atc	cta	aac	cag	ctg	ttc	529
104	Gly	His	Val	Met	Ile	Ala	Phe	Leu	Pro	Thr	Ile	Leu	Asn	Gln	Leu	Phe	
105				165				170			175						
107	cga	gtc	ctc	acc	aga	gcc	aca	cag	gaa	gaa	gtc	gcg	gtt	aac	gtg	act	577
108	Arg	Val	Leu	Thr	Arg	Ala	Thr	Gln	Glu	Glu	Val	Ala	Val	Asn	Val	Thr	
109			180				185				190						
111	cgg	gtc	att	att	cat	gtg	gtt	gcc	cag	tgc	cat	gag	gaa	gga	ttg	gag	625
112	Arg	Val	Ile	Ile	His	Val	Val	Ala	Gln	Cys	His	Glu	Glu	Gly	Leu	Glu	
113			195				200				205						
115	agc	cac	ttg	agg	tca	tat	gtt	aag	tac	gcg	tat	aag	gct	gag	cca	tat	673
116	Ser	His	Leu	Arg	Ser	Tyr	Val	Lys	Tyr	Ala	Tyr	Lys	Ala	Glu	Pro	Tyr	
117		210			215			220									
119	gtt	gcc	tct	gaa	tac	aag	aca	gtg	cat	gaa	gaa	ctg	acc	aaa	tcc	atg	721
120	Val	Ala	Ser	Glu	Tyr	Lys	Thr	Val	His	Glu	Glu	Leu	Thr	Lys	Ser	Met	
121	225				230			235			240						
123	acc	acg	att	ctc	aag	cct	tct	gcc	gat	ttc	ctc	acc	agc	aac	aaa	cta	769
124	Thr	Thr	Ile	Leu	Lys	Pro	Ser	Ala	Asp	Phe	Leu	Thr	Ser	Asn	Lys	Leu	
125				245				250			255						
127	ctg	agg	tac	tca	tgg	ttt	ttc	ttt	gat	gta	ctg	atc	aaa	tct	atg	gct	817
128	Leu	Arg	Tyr	Ser	Trp	Phe	Phe	Phe	Asp	Val	Leu	Ile	Lys	Ser	Met	Ala	
129			260				265				270						

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132	Gln	His	Leu	Ile	Glu	Asn	Ser	Lys	Val	Lys	Leu	Leu	Arg	Asn	Gln	Arg	
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135	ttt	cct	gca	tcc	tat	cat	cat	gca	gcg	gaa	acc	gtt	gta	aat	atg	ctg	913
136	Phe	Pro	Ala	Ser	Tyr	His	His	Ala	Ala	Glu	Thr	Val	Val	Asn	Met	Leu	
137		290					295					300					
139	atg	cca	cac	atc	act	cag	aag	ttt	gga	gat	aat	cca	gag	gca	tct	aag	961
140	Met	Pro	His	Ile	Thr	Gln	Lys	Phe	Gly	Asp	Asn	Pro	Glu	Ala	Ser	Lys	
141	305					310					315					320	
143	aac	gcg	aat	cat	agc	ctt	gct	gtc	ttc	atc	aag	aga	tgt	ttc	acc	ttc	1009
144	Asn	Ala	Asn	His	Ser	Leu	Ala	Val	Phe	Ile	Lys	Arg	Cys	Phe	Thr	Phe	
145				325					330					335			
147	atg	gac	agg	ggc	ttt	gtc	ttc	aag	cag	atc	aac	aac	tac	att	agc	tgt	1057
148	Met	Asp	Arg	Gly	Phe	Val	Phe	Lys	Gln	Ile	Asn	Asn	Tyr	Ile	Ser	Cys	
149			340						345				350				
151	ttt	gct	cct	gga	gac	cca	aag	acc	ctc	ttt	gaa	tac	aag	ttt	gaa	ttt	1105
152	Phe	Ala	Pro	Gly	Asp	Pro	Lys	Thr	Leu	Phe	Glu	Tyr	Lys	Phe	Glu	Phe	
153			355					360					365				
155	ctc	cgt	gta	gtg	tgc	aac	cat	gaa	cat	tat	att	ccg	ttg	aac	tta	cca	1153
156	Leu	Arg	Val	Val	Cys	Asn	His	Glu	His	Tyr	Ile	Pro	Leu	Asn	Leu	Pro	
157		370				375					380						
159	atg	cca	ttt	gga	aaa	ggc	agg	att	caa	aga	tac	caa	gac	ctc	cag	ctt	1201
160	Met	Pro	Phe	Gly	Lys	Gly	Arg	Ile	Gln	Arg	Tyr	Gln	Asp	Leu	Gln	Leu	
161	385					390					395					400	
163	gac	tac	tca	tta	aca	gat	gag	ttc	tgc	aga	aac	cac	ttc	ttg	gtg	gga	1249
164	Asp	Tyr	Ser	Leu	Thr	Asp	Glu	Phe	Cys	Arg	Asn	His	Phe	Leu	Val	Gly	
165				405					410				415				
167	ctg	tta	ctg	agg	gag	gtg	ggg	aca	gcc	ctc	cag	gag	ttc	cgg	gag	gtc	1297
168	Leu	Leu	Leu	Arg	Glu	Val	Gly	Thr	Ala	Leu	Gln	Glu	Phe	Arg	Glu	Val	
169			420					425					430				
171	cgt	ctg	atc	gcc	atc	agt	gtg	ctc	aag	aac	ctg	ctg	ata	aag	cat	tct	1345
172	Arg	Leu	Ile	Ala	Ile	Ser	Val	Leu	Lys	Asn	Leu	Leu	Ile	Lys	His	Ser	
173			435					440					445				
175	ttt	gat	gac	aga	tat	gct	tca	agg	agc	cat	cag	gca	agg	ata	gcc	acc	1393
176	Phe	Asp	Asp	Arg	Tyr	Ala	Ser	Arg	Ser	His	Gln	Ala	Arg	Ile	Ala	Thr	
177		450				455					460						
179	ctc	tac	ctg	cct	ctg	ttt	ggt	ctg	ctg	att	gaa	aac	gtc	cag	cgg	atc	1441
180	Leu	Tyr	Leu	Pro	Leu	Phe	Gly	Leu	Leu	Ile	Glu	Asn	Val	Gln	Arg	Ile	
181	465					470					475					480	
183	aat	gtg	agg	gat	gtg	tca	ccc	ttc	cct	gtg	aac	gcg	ggc	atg	acc	gtg	1489
184	Asn	Val	Arg	Asp	Val	Ser	Pro	Phe	Pro	Val	Asn	Ala	Gly	Met	Thr	Val	
185				485					490				495				
187	aag	gat	gaa	tcc	ctg	gct	cta	cca	gct	gtg	aat	ccg	ctg	gtg	acg	ccg	1537
188	Lys	Asp	Glu	Ser	Leu	Ala	Leu	Pro	Ala	Val	Asn	Pro	Leu	Val	Thr	Pro	
189			500					505					510				
191	cag	aag	gga	agc	acc	ctg	gac	aac	agc	ctg	cac	aag	gac	ctg	ctg	ggc	1585
192	Gln	Lys	Gly	Ser	Thr	Leu	Asp	Asn	Ser	Leu	His	Lys	Asp	Leu	Leu	Gly	
193			515					520					525				
195	gcc	atc	tcc	ggc	att	gct	tct	cca	tat	aca	acc	tca	act	cca	aac	atc	1633

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201 545      550      555      560
203 tcg ggt aac agc ctt cca gaa agg aat agt gag aag agc aat tcc ctg 1729
204 Ser Gly Asn Ser Leu Pro Glu Arg Asn Ser Glu Lys Ser Asn Ser Leu
205      565      570      575
207 gat aag cac caa caa agt agc aca ttg gga aat tcc gtg gtt cgc tgt 1777
208 Asp Lys His Gln Gln Ser Ser Thr Leu Gly Asn Ser Val Val Arg Cys
209      580      585      590
211 gat aaa ctt gac cag tct gag att aag agc cta ctg atg tgt ttc ctc 1825
212 Asp Lys Leu Asp Gln Ser Glu Ile Lys Ser Leu Leu Met Cys Phe Leu
213      595      600      605
215 tac atc tta aag agc atg tct gat gat gct ttg ttt aca tat tgg aac 1873
216 Tyr Ile Leu Lys Ser Met Ser Asp Asp Ala Leu Phe Thr Tyr Trp Asn
217      610      615      620
219 aag gct tca aca tct gaa ctt atg gat ttt ttt aca ata tct gaa gtc 1921
220 Lys Ala Ser Thr Ser Glu Leu Met Asp Phe Phe Thr Ile Ser Glu Val
221 625      630      635      640
223 tgc ctg cac cag ttc cag tac atg ggg aag cga tac ata gcc agg aac 1969
224 Cys Leu His Gln Phe Gln Tyr Met Gly Lys Arg Tyr Ile Ala Arg Asn
225      645      650      655
227 cag gag ggg ttg gga ccc ata gtt cat gat cga aag tct cag aca ttg 2017
228 Gln Glu Gly Leu Gly Pro Ile Val His Asp Arg Lys Ser Gln Thr Leu
229      660      665      670
231 cct gtt tcc cgt aac aga aca gga atg atg cat gcc aga ttg cag cag 2065
232 Pro Val Ser Arg Asn Arg Thr Gly Met Met His Ala Arg Leu Gln Gln
233      675      680      685
235 ctg ggc agc ctg gat aac tct ctc act ttt aac cac agc tat ggc cac 2113
236 Leu Gly Ser Leu Asp Asn Ser Leu Thr Phe Asn His Ser Tyr Gly His
237      690      695      700
239 tcg gac gca gat gtt ctg cac cag tca tta ctt gaa gcc aac att gct 2161
240 Ser Asp Ala Asp Val Leu His Gln Ser Leu Leu Glu Ala Asn Ile Ala
241 705      710      715      720
243 act gag gtt tgc ctg aca gct ctg gac acg ctt tct cta ttt aca ttg 2209
244 Thr Glu Val Cys Leu Thr Ala Leu Asp Thr Leu Ser Leu Phe Thr Leu
245      725      730      735
247 gcg ttt aag aac cag ctc ctg gcc gac cat gga cat aat cct ctc atg 2257
248 Ala Phe Lys Asn Gln Leu Leu Ala Asp His Gly His Asn Pro Leu Met
249      740      745      750
251 aaa aaa gtt ttt gat gtc tac ctg tgt ttt ctt caa aaa cat cag tct 2305
252 Lys Lys Val Phe Asp Val Tyr Leu Cys Phe Leu Gln Lys His Gln Ser
253      755      760      765
255 gaa acg gct tta aaa aat gtc ttc act gcc tta agg tcc tta att tat 2353
256 Glu Thr Ala Leu Lys Asn Val Phe Thr Ala Leu Arg Ser Leu Ile Tyr
257      770      775      780
259 aag ttt ccc tca aca ttc tat gaa ggg aga gcg gac atg tgt gcg gct 2401
260 Lys Phe Pro Ser Thr Phe Tyr Glu Gly Arg Ala Asp Met Cys Ala Ala

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263	ctg	tgt	tac	gag	att	ctc	aag	tgc	tgt	aac	tcc	aag	ctg	agc	tcc	atc		2449	
264	Leu	Cys	Tyr	Glu	Ile	Leu	Lys	Cys	Cys	Asn	Ser	Lys	Leu	Ser	Ser	Ile			
265						805				810					815				
267	agg	acg	gag	gcc	tcc	cag	ctg	ctc	tac	ttc	ctg	atg	agg	aac	aac	ttt		2497	
268	Arg	Thr	Glu	Ala	Ser	Gln	Leu	Leu	Tyr	Phe	Leu	Met	Arg	Asn	Asn	Phe			
269						820				825					830				
271	gat	tac	act	gga	aag	aag	tcc	ttt	gtc	cgg	aca	cat	ttg	caa	gtc	atc		2545	
272	Asp	Tyr	Thr	Gly	Lys	Lys	Ser	Phe	Val	Arg	Thr	His	Leu	Gln	Val	Ile			
273						835				840					845				
275	ata	tct	gtc	agc	cag	ctg	ata	gca	gac	gtt	gtt	ggc	att	ggg	gaa	acc		2593	
276	Ile	Ser	Val	Ser	Gln	Leu	Ile	Ala	Asp	Val	Val	Gly	Ile	Gly	Glu	Thr			
277						850				855					860				
279	aga	ttc	cag	cag	tcc	ctg	tcc	atc	atc	aac	aac	tgt	gcc	aac	agt	gac		2641	
280	Arg	Phe	Gln	Gln	Ser	Leu	Ser	Ile	Ile	Asn	Asn	Cys	Ala	Asn	Ser	Asp			
281	865					870				875					880				
283	cgg	ctt	att	aag	cac	acc	agc	ttc	tcc	tct	gat	gtg	aag	gac	tta	acc		2689	
284	Arg	Leu	Ile	Lys	His	Thr	Ser	Phe	Ser	Ser	Asp	Val	Lys	Asp	Leu	Thr			
285						885				890					895				
287	aaa	agg	ata	cgc	acg	gtg	cta	atg	gcc	acc	gcc	cag	atg	aag	gag	cat		2737	
288	Lys	Arg	Ile	Arg	Thr	Val	Leu	Met	Ala	Thr	Ala	Gln	Met	Lys	Glu	His			
289						900				905					910				
291	gag	aac	gac	cca	gag	atg	ctg	gtg	gac	ctc	cag	tac	agc	ctg	gcc	aaa		2785	
292	Glu	Asn	Asp	Pro	Glu	Met	Leu	Val	Asp	Leu	Gln	Tyr	Ser	Leu	Ala	Lys			
293						915				920					925				
295	tcc	tat	gcc	agc	acg	ccc	gag	ctc	agg	aag	acg	tgg	ctc	gac	agc	atg		2833	
296	Ser	Tyr	Ala	Ser	Thr	Pro	Glu	Leu	Arg	Lys	Thr	Trp	Leu	Asp	Ser	Met			
297						930				935					940				
299	gcc	agg	atc	cat	gtc	aaa	aat	ggc	gat	ctc	tca	gag	gca	gca	atg	tgc		2881	
300	Ala	Arg	Ile	His	Val	Lys	Asn	Gly	Asp	Leu	Ser	Glu	Ala	Ala	Met	Cys			
301	945					950				955					960				
303	tat	gtc	cac	gta	aca	gcc	cta	gtg	gca	gaa	tat	ctc	aca	cgg	aaa	ggc		2929	
304	Tyr	Val	His	Val	Thr	Ala	Leu	Val	Ala	Glu	Tyr	Leu	Thr	Arg	Lys	Gly			
305						965				970					975				
307	gtg	ttt	aga	caa	gga	tgc	acc	gcc	ttc	agg	gtc	att	acc	cca	aac	atc		2977	
308	Val	Phe	Arg	Gln	Gly	Cys	Thr	Ala	Phe	Arg	Val	Ile	Thr	Pro	Asn	Ile			
309						980				985					990				
311	gac	gag	gag	gcc	tcc	atg	atg	gaa	gac	gtg	ggg	atg	cag	gat	gtc	cat		3025	
312	Asp	Glu	Glu	Ala	Ser	Met	Met	Glu	Asp	Val	Gly	Met	Gln	Asp	Val	His			
313						995				1000					1005				
315	ttc	aac	gag	gat	gtg	ctg	atg	gag	ctc	ctt	gag	cag	tgc	gca	gat	gga		3073	
316	Phe	Asn	Glu	Asp	Val	Leu	Met	Glu	Leu	Leu	Glu	Gln	Cys	Ala	Asp	Gly			
317						1010				1015					1020				
319	ctc	tgg	aaa	gcc	gag	cgc	tac	gag	ctc	atc	gcc	gac	atc	tac	aaa	ctt		3121	
320	Leu	Trp	Lys	Ala	Glu	Arg	Tyr	Glu	Leu	Ile	Ala	Asp	Ile	Tyr	Lys	Leu			
321	1025					1030				1035					1040				
323	atc	atc	ccc	att	tat	gag	aag	cgg	agg	gat	ttc	ttt	gaa	gat	gaa	gat		3169	
324	Ile	Ile	Pro	Ile	Tyr	Glu	Lys	Arg	Arg	Asp	Phe	Phe	Glu	Asp	Glu	Asp			
325						1045				1050					1055				

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/687,837

DATE: 04/23/2002

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Input Set : A:\20054210.app

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L:5199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:5229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:5237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:5238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
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L:5259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:5295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71
L:5305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71
L:5330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:5364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:5393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:5394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:5395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:5396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:5421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75
L:5423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75
L:5424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/687,837

DATE: 04/23/2002

TIME: 09:34:14

Input Set : A:\20054210.app

Output Set: N:\CRF3\04232002\I687837.raw

L:5425 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75

L:5451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76